

● **BLAUPUNKT**

AUTORADIO

Madrid C 70

7 640 800 310

Milano C 70

7 640 802 310

Alaska DJ 70

7 640 906 310/319

Dallas MD 70

7 640 824 310

New Orleans MD 70

7 640 825 310

Arizona DJ 70

7 640 903 319

Missouri DJ 70

7 640 900 319

Washington DJ 70

7 640 908 310/319

8 622 402 647 BN-ST 10/00

Schaltbild • Circuit diagram

**CLASS 1
LASER PRODUCT**



**UNSICHTBARE LASERSTRAHLUNG
NICHT DEM STRAHL AUSSETZEN
LASERKLASSE 3B**



(D) VORSICHT!

**Die CD Geräte beinhalten eine Laserkomponente!
Im Servicefall bitte nachfolgende Hinweise
beachten:**

- Das Gerät arbeitet mit unsichtbarem Laserstrahl.
- Bei geöffnetem Gerät tritt im Bereich des Plattenfaches Laserstrahlung aus.
- Nicht in den Strahl blicken.
- Unbeteiligte Personen vom Arbeitsplatz fernhalten.
- Der Betrachtungsabstand darf 13 cm nicht unterschreiten.
- Kann dies nicht eingehalten werden, muß eine geeignete Laserschutzbrille getragen werden.

(GB) CAUTION!

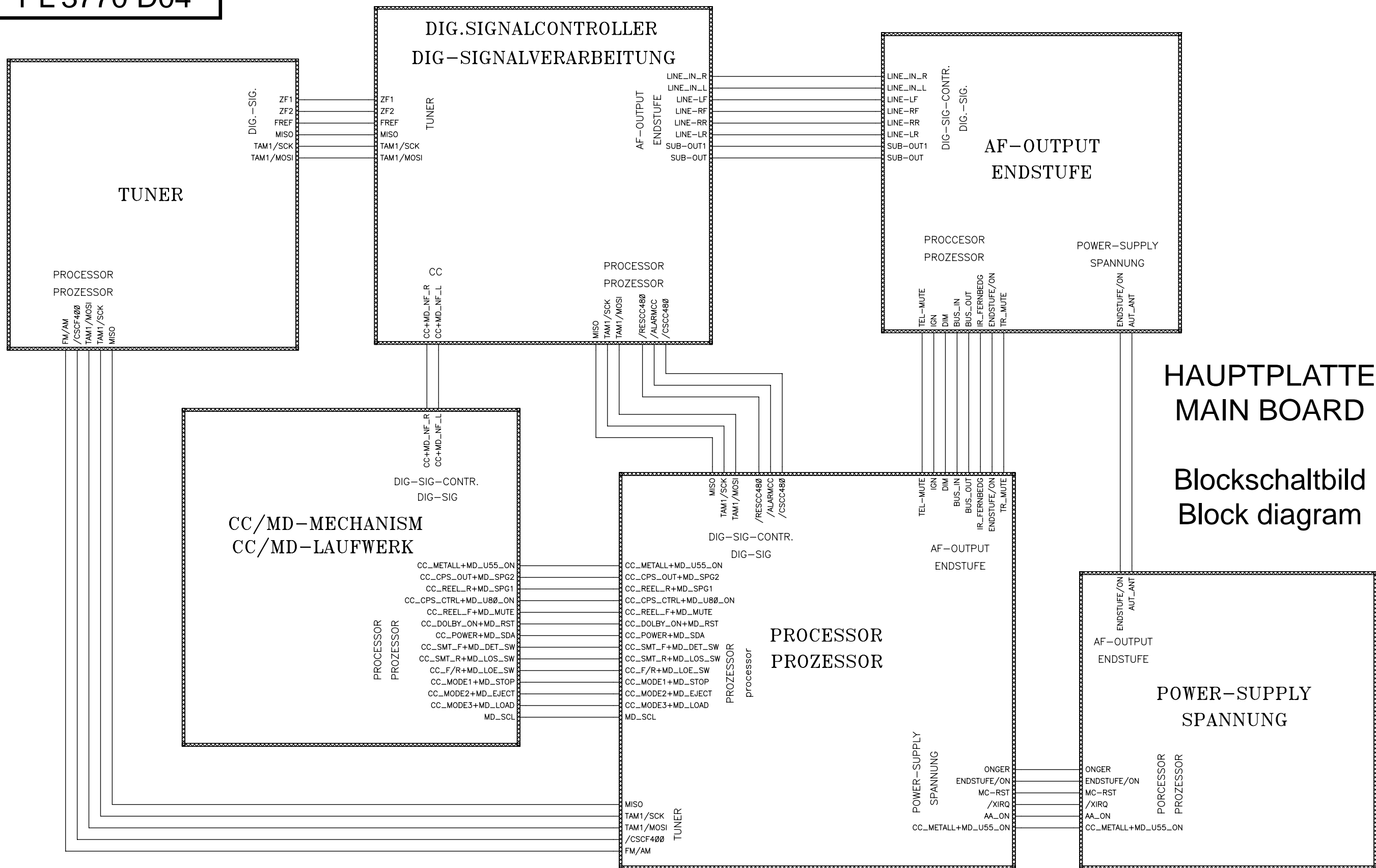
**The CD unit are equipped with a laser component!
For servicing make sure to observe the following
instructions:**

- The unit operates with invisible laser beams.
- When the cover is removed, invisible laser beams are emitted near the disc compartment.
- Avoid direct eye contact with these beams.
- Keep unauthorised persons away from the workbench.
- The viewing distance should not be less than 13 cm.
- If this distance cannot be kept, use suitable laser safety goggles.

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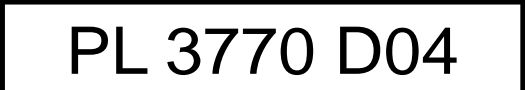
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PL 3770 D04



HAUPTPLATTE
MAIN BOARD

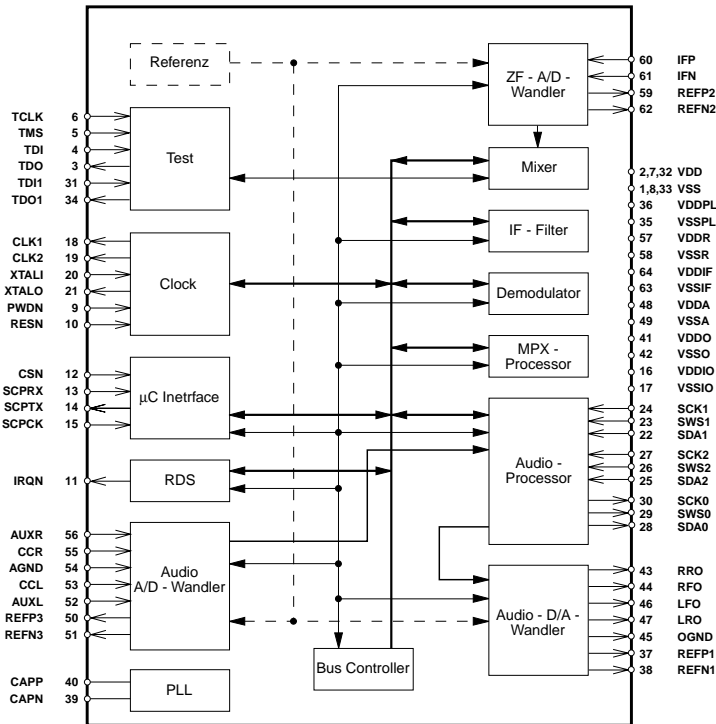
Blockschaltbild
Block diagram



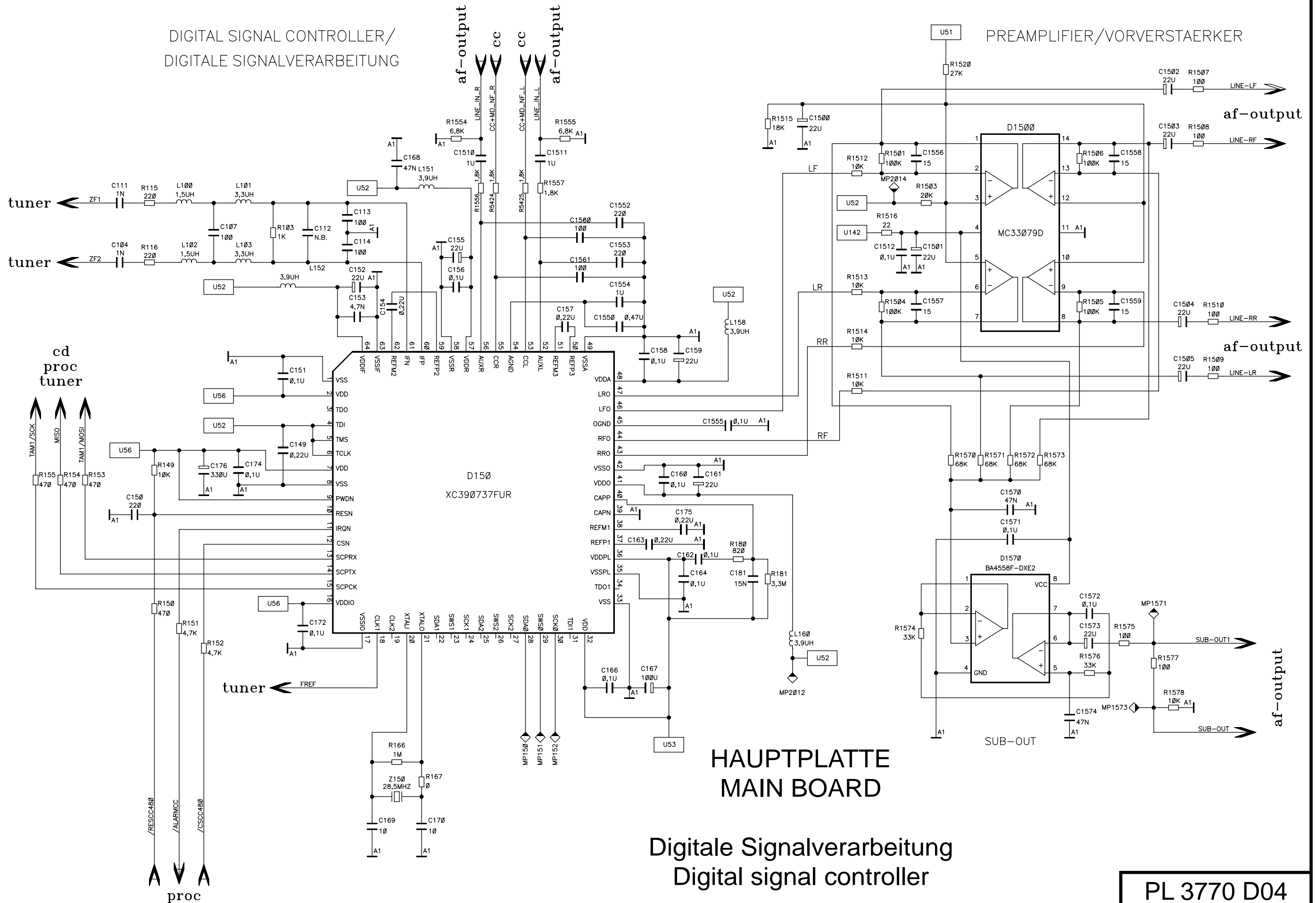
Prüfdiagnose Tuner IC (D1) Diagnosis test tuner IC (D1)						
Pin	Band	Frequenz	E'	Uss	Vermerke	Notice
24+25 (ZF-OUT)	FM	97,1 MHz	83 dBμV	650 mVss	jeweils gegen Masse	respective against GND
28	FM	97,1 MHz	80 dBμV	25 mVss		
31+32	FM	97,1 MHz	80 dBμV	200 mVss	jeweils gegen Masse	respective against GND
31+32	AM	900 kHz	80 dBμV	200 mVss	jeweils gegen Masse	respective against GND
34 (AM-IN)	AM	900 kHz	80 dBμV	50 mVss		
36	AM	900 kHz	ab 73 dBμV		künstliche Antenne aus	not commutated
37	FM	97,1 MHz	ab 80 dBμV			
43 (FM-IN)	FM	97,1 MHz	94 dBμV	5 mVss		

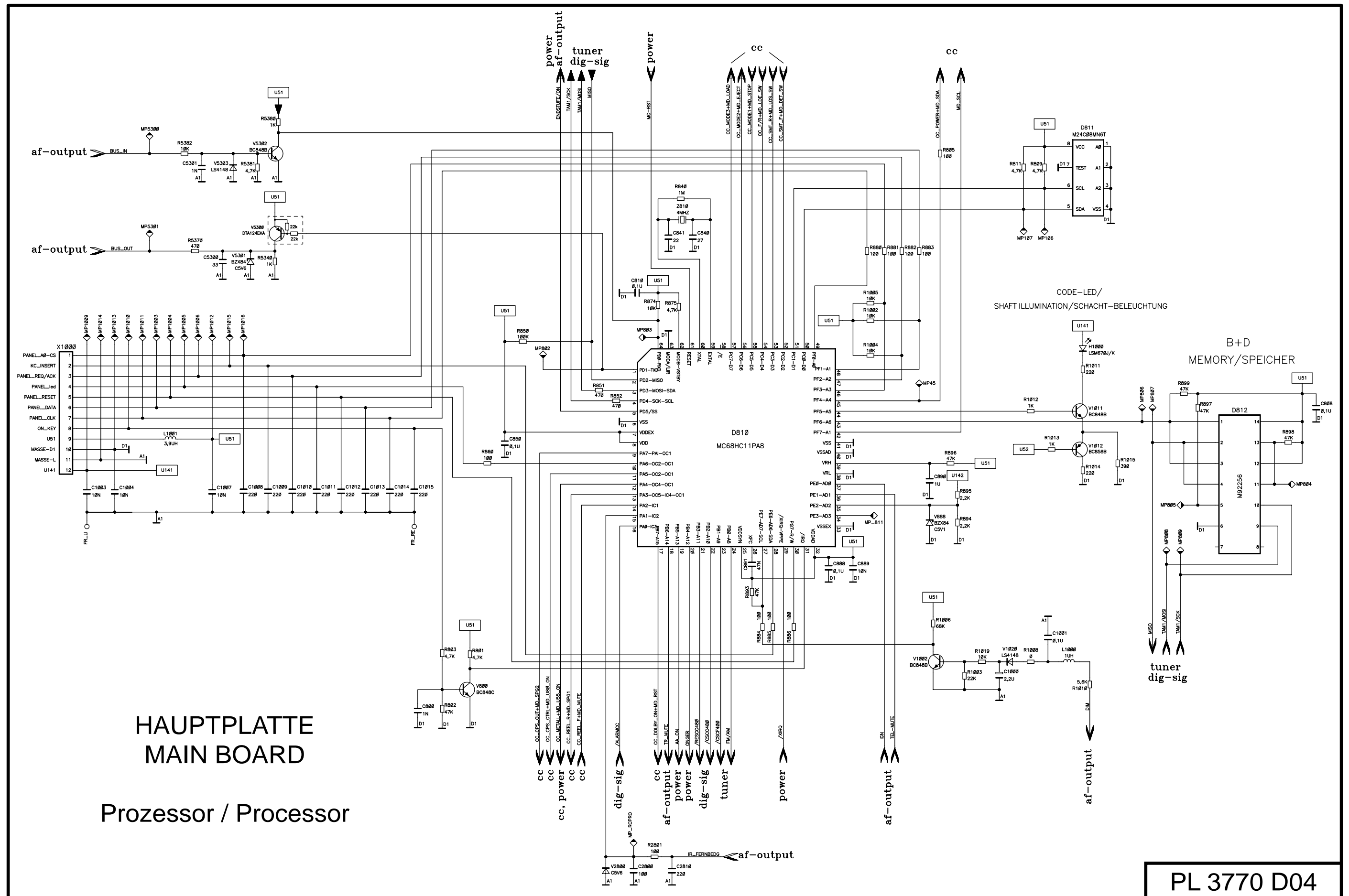
Pin-Belegung des FM/AM Tuner-IC D1 Tuner IC D1 Pin configuration					
Pin No.	I/O	Name	Funktion	Function	
1	-	MIXDEC	Mischer Entkopplung	Mixer decoupling	
2	-	CINT	für PLL	for PLL	
3	-	CHOLD	für PLL	for PLL	
4	-	PLLGND	PLL - Masse	PLL Ground	
5	-	VCC	8,5V	8,5V	
6	-	VPLL	PLL Oberspannung	PLL top voltage	
7	I	LFINP	Schleifenfiltereingang	PLL loop filter Input	
8	O	LF1	Schleifenfilter 1	PLL loop filter Output 1	
9	O	LF2	Schleifenfilter 2	PLL loop filter Output 2	
10	O	LF3	Schleifenfilter 3	PLL loop filter Output 3	
11	I	VTUNE	Abstimmungsspannung	Tuning voltage	
12	I	OSCINP	Oszillator Eingang	Oscillator Input	
13	O	OSCOUT	Oszillator Ausgang	Oscillator Output	
14	-	OSCGND	Oszillator Masse	Oscillator Ground	
15	O	VCC	8,5V	8,5V	
16	O	OSCBUF	Oszillatorausgangstreiber	Oscillator Buffer Output	
17	I	DGND	Digitale Masse	Digital Ground	
18	I	CS	Chip Select	Chip Select	
19	I	RD	Dateneingang	DATA IN	
20	I	CLK	Clock	Clock	
21	O	TX	Datenausgang	DATA OUT	
22	I	FREF	Referenzfrequenz	Reference frequency	
23	-	IFAGC2	ZF Regelspannung 2	IF AGC 2	
24	O	IFOUT1	ZF - Ausgang 1	IF output 1	
25	O	IFOUT2	ZF - Ausgang 2	IF output 2	
26	-	IFAGC1	ZF Regelspannung 1	IF AGC 1	
27	-	IFGND	ZF Masse	IF Ground	
28	I	IFIN	ZF Eingang	IF Input	
29	-	VDC	Interne Referenzspannung	Internal reference voltage	
30	-	VCC	8,5V	8,5V	
31	O	MIXOUT2	Mischerausgang 2	Mixer Output 2	
32	O	MIXOUT1	Mischerausgang 1	Mixer Output 1	
33	-	AMREF	AM - Referenzeingang	AM reference Input	
34	I	AMMIXIN	AM Mischereingang	AM Mixer Input	
35	-	RFAGC3	HF Regelzeitkonstante (aufregeln)	RF AGC 3	
36	O	RFAGCAM	HF Steuerspannung Vorstufe AM	RF AGC for AM input stage	
37	O	RFAGCFM	HF Steuerspannung Vorstufe FM	RF AGC for FM input stage	
38	-	MIXGND	Mischer Masse	Mixer Ground	
39	-	RFAGC2	HF Regelzeitkonstante (Detektor)	RF AGC 2	
40	-	RFAGC1	HF Regelzeitkonstante (abregeln)	RF AGC 1	
41	-	ANGGND	Analog Masse	Analog ground	
42	-	FMMIXREF	Referenzspannung FM Mischer	Reference voltage FM mixer	
43	I	FMMIXINP	FM Mischer Eingang	FM mixer input	
44	-	RFAGCD	AGC Entkopplung	AGC decoupling	

D150



Pin-Belegung des IC D150 Digital IC D150 Pin Configuration				
Pin No.	I/O	Name	Funktion	Function
1	-	VSS	Masse	Ground
2	-	VDD	5 V	5 V
4	I	TDI	Testdateneingang	Test Data Input
5	I	TMS	Test Mode	Testmode
6	I	TCLK	Test Clock	Testclock
7	-	VDD	5 V	5 V
8	-	VSS	Masse	Ground
9	-	PWDN	Power down Zustand	Power down Mode
10	I	RESN	Reset	Hardware reset (active LOW)
11	O	IRQN	RDS Alarm/SLS	RDS alarm/search stop
12	I	CSN	Chip select Eingang	Chip select µC interface
13	I	SCPRX	Serielle Daten µC Interface	Serial data µC interface IN
14	O	SCPTX	Serielle Daten µC Interface	Serial data µC interface OUT
15	I	SCPCCK	Clock µC Interface	Clock µC interface
16	-	VDDIO	Plusspannung Digitale Ein-/Ausgänge	Voltage for digital I/O
17	-	VSSIO	Masse Digitale Ein-/Ausgänge	Ground for digital I/O
18	O	CKL1	Programmierbarer Clock 1	Programmable clock 1
20	I	XTALI	28,5 MHz Oszillator	Oscillator 28,5 MHz
21	O	XTALO	28,5 MHz Oszillator	Oscillator 28,5 MHz
31	I	TDI1	Testdateneingang 1	Test Input 1
32	-	VDD	5 V	5 V
33	-	VSS	Masse	Ground
35	-	VSSPLL	Masse (Minus) PLL	Ground (minus) PLL
36	-	VDDPLL	Plus PLL 5V	PLL 5V (pos.)
37	O	REFP1	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
38	O	REFN1	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
39	-	CAPN	PLL Kapazität (negativ)	PLL capacity (neg.)
40	-	CAPP	PLL Kapazität (positiv)	PLL capacity (pos.)
41	-	VDDO	Audio D/A - Wandler 5V	Audio D/A converter (+5V)
42	-	VSSO	Audio D/A - Wandler Masse	Audio D/A converter (ground)
44	O	RFO	Audio Rechts (analog)	Analogic audio right
45	-	OGND	Masse Analogausgänge	Ground
46	-	LFO	Audio Links (analog)	Analogic audio left
48	-	VDDA	5V A/D - Wandler	5V A/D - converter
49	-	VSSA	Masse A/D - Wandler	Ground A/D - converter
50	O	REFP3	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
51	O	REFN3	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
52	I	AUXL	Externer Eingang links	Auxiliary left
53	I	CCL	Cassette Eingang links	Cassette input left
54	-	AGND	Audioeingänge Masse	Ground for Audio inputs
55	I	CCR	Cassette Eingang rechts	Cassette input right
56	I	AUXR	Externer Eingang rechts	Auxiliary left right
57	-	VDDR	5 V	5 V
58	-	VSSR	Masse	Ground
59	O	REFP2	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
60	I	IFP	ZF Eingang (plus)	Positif IF input
61	I	IFN	ZF Eingang (minus)	IF input (neg.)
62	O	REFN2	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
63	-	VSSIF	ZF A/D - Wandler (minus)	IF A/D converter (-)
64	-	VDDIF	ZF A/D - Wandler 5 V	IF A/D converter (+5V)





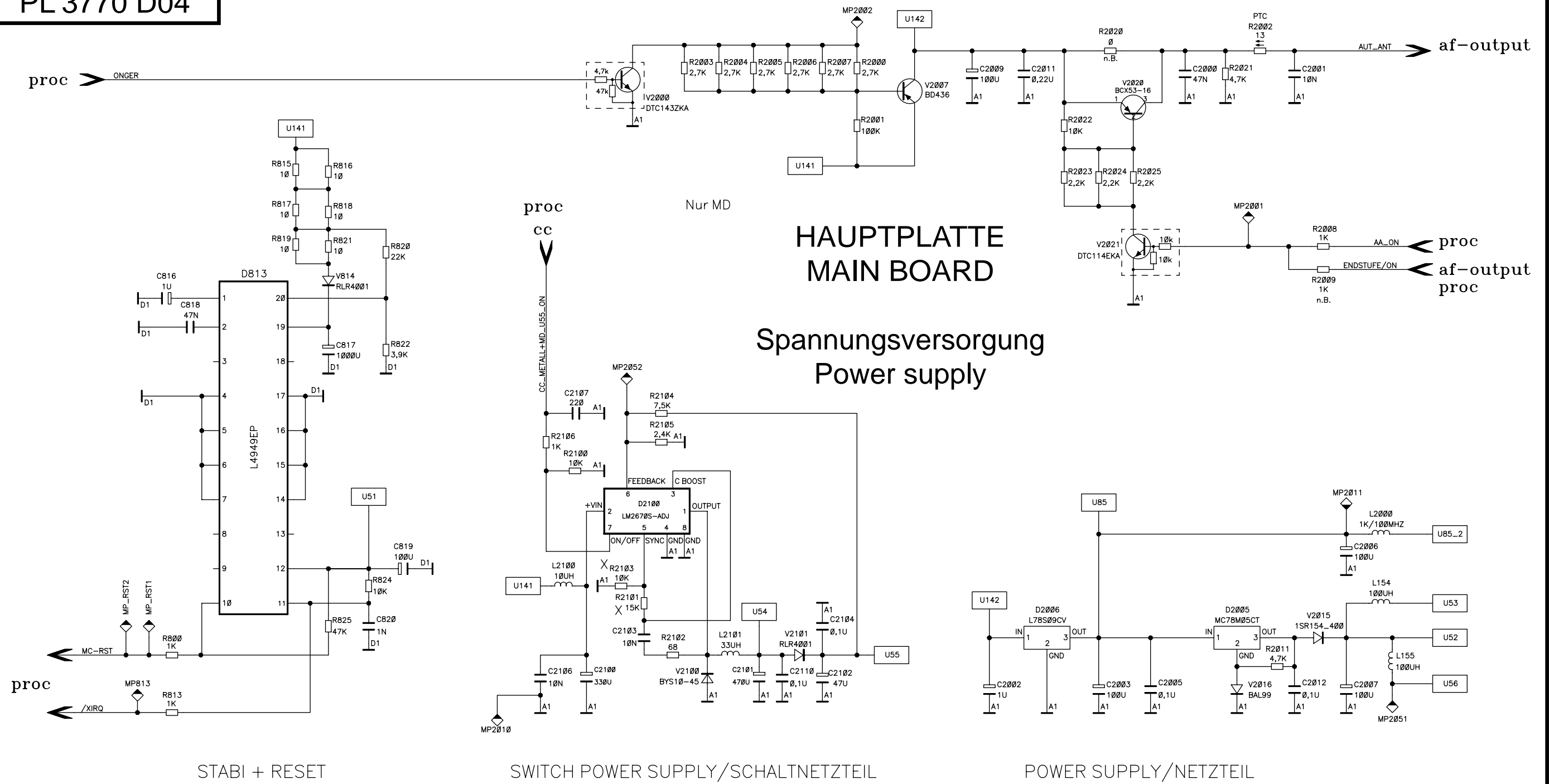


Figure 1 displays a schematic representation of 1200 genes, organized into 10 columns. Each gene is represented by a diamond shape with arrows pointing to it, indicating the number of genes in that column. The genes are arranged in a grid-like fashion, with the first 9 columns showing genes with multiple arrows and the 10th column showing genes with a single arrow. The genes are labeled as follows:

- Column 1: MP_X8, MP_X3, MP_X5, MP_X4, MP_X23, MP_X24, MP_X2, MP_X1, MP_X17
- Column 2: MP_X11, MP_X18, MP_X7, MP17, MP_X19, MP_X21, MP_X6, MP_X20
- Column 3: MP12, MP_X7, MP9, MP8, MP7, MP6, MP5, MP4
- Column 4: MPGW, MP_X9, MP_BDO, MP_X15, MP_X16, MP_RF2, MP_X12
- Column 5: MP_FE1, MPU5, MP19, MP_TE, MP_TE1, MP18, MP5123
- Column 6: MP1311
- Column 7: MP1312
- Column 8: MP1313
- Column 9: MP1314
- Column 10: MP1315
- Column 11: MP1316
- Column 12: MP1318
- Column 13: MP1319
- Column 14: MP1320
- Column 15: MP1310
- Column 16: MP1308
- Column 17: MP1307
- Column 18: MP1306
- Column 19: MP1305
- Column 20: MP1304

A1
R7
Ø
A1

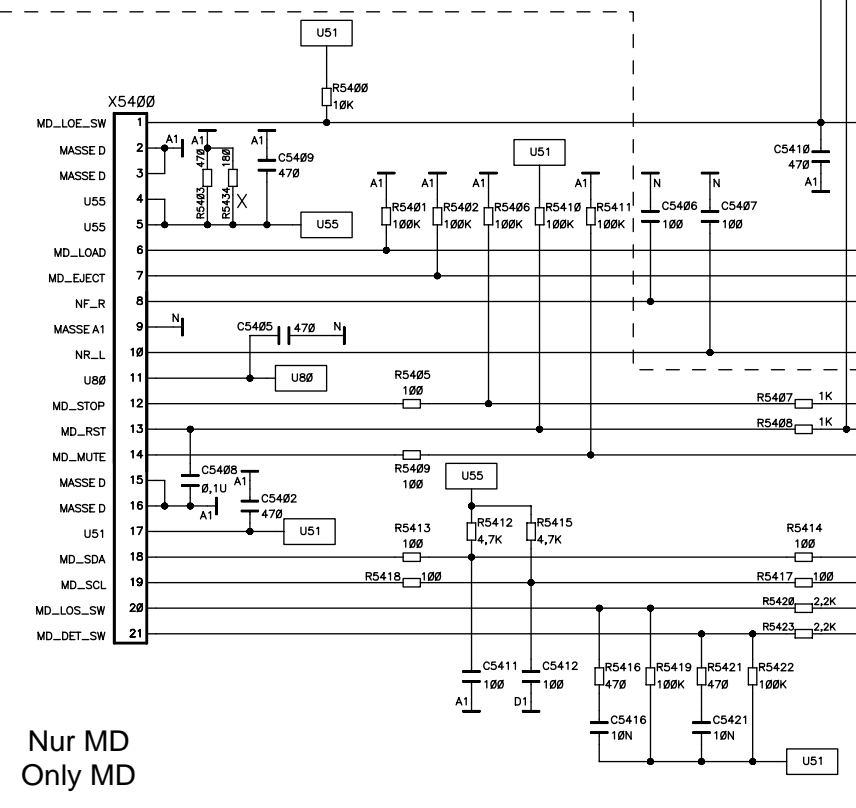
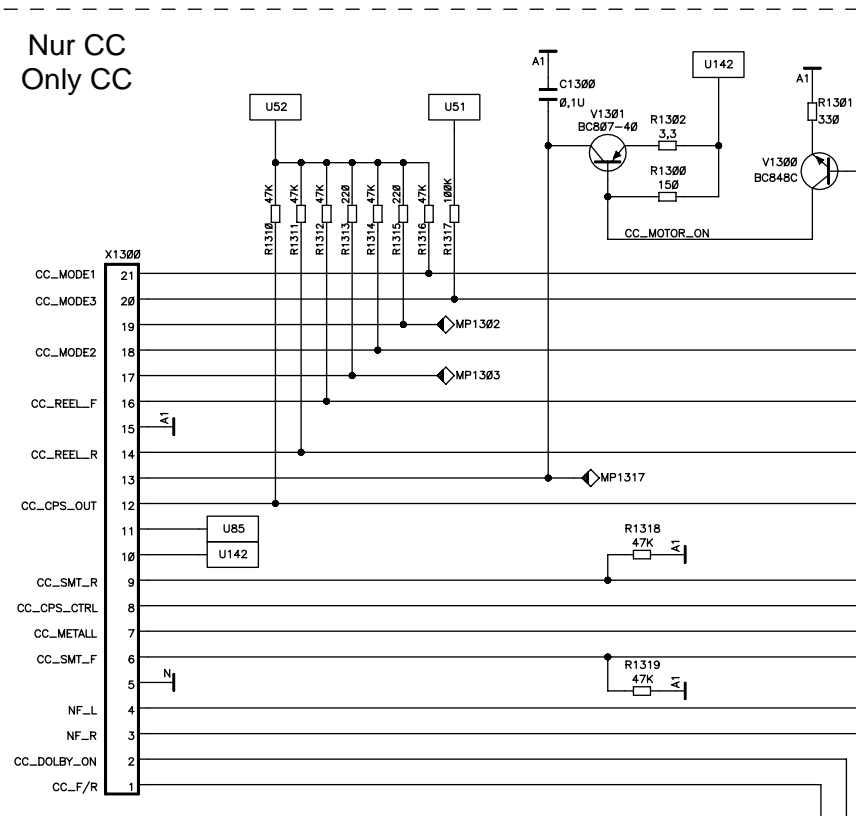
N
C5403
1N
A1

X = nicht bestueckt
* = nur in US-Geraeten
** Nur EU

CC-Motor-Steuerung CC-Motor-Control

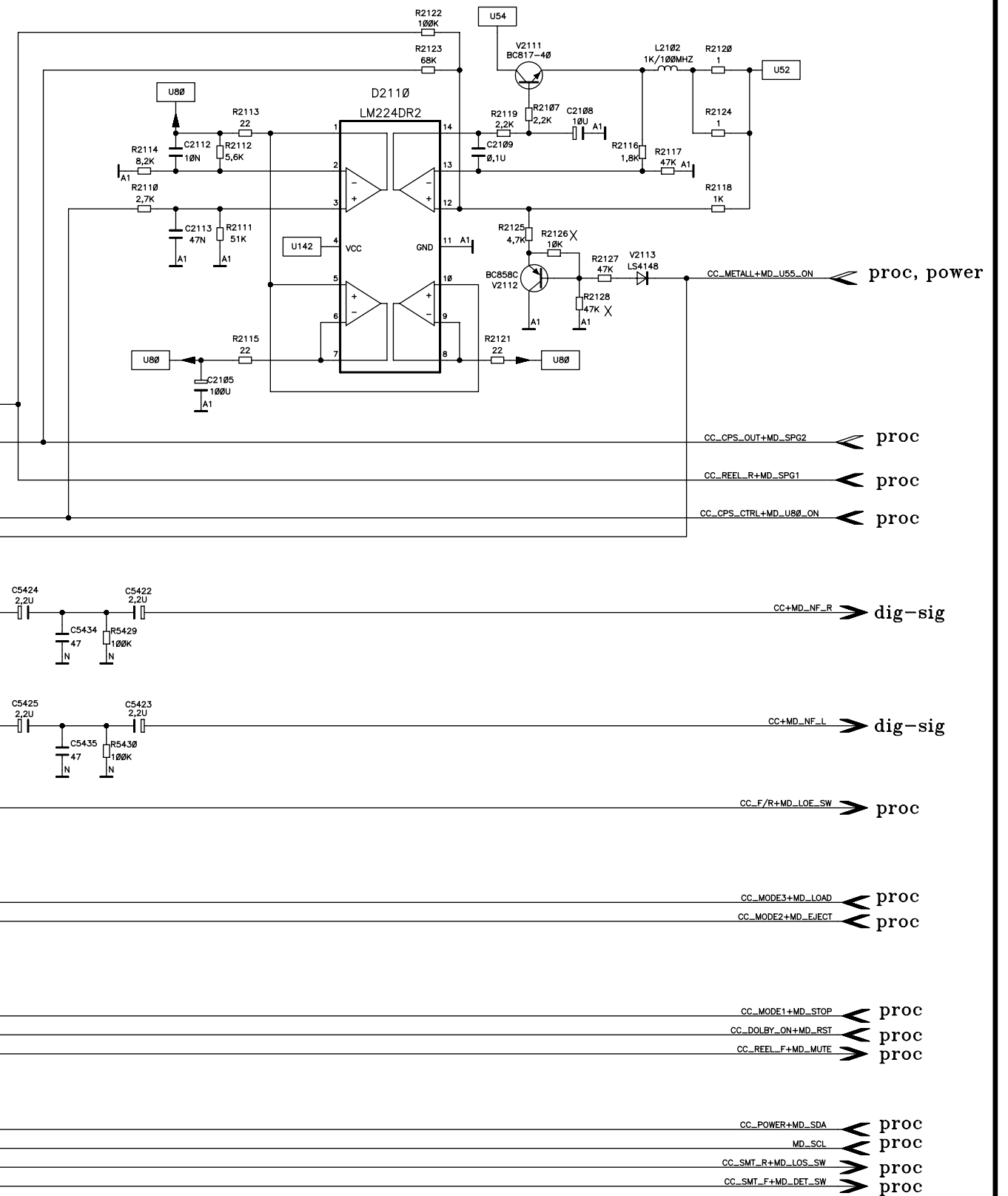
HAUPTPLATTE MAIN BOARD

Nur CC
Only CC



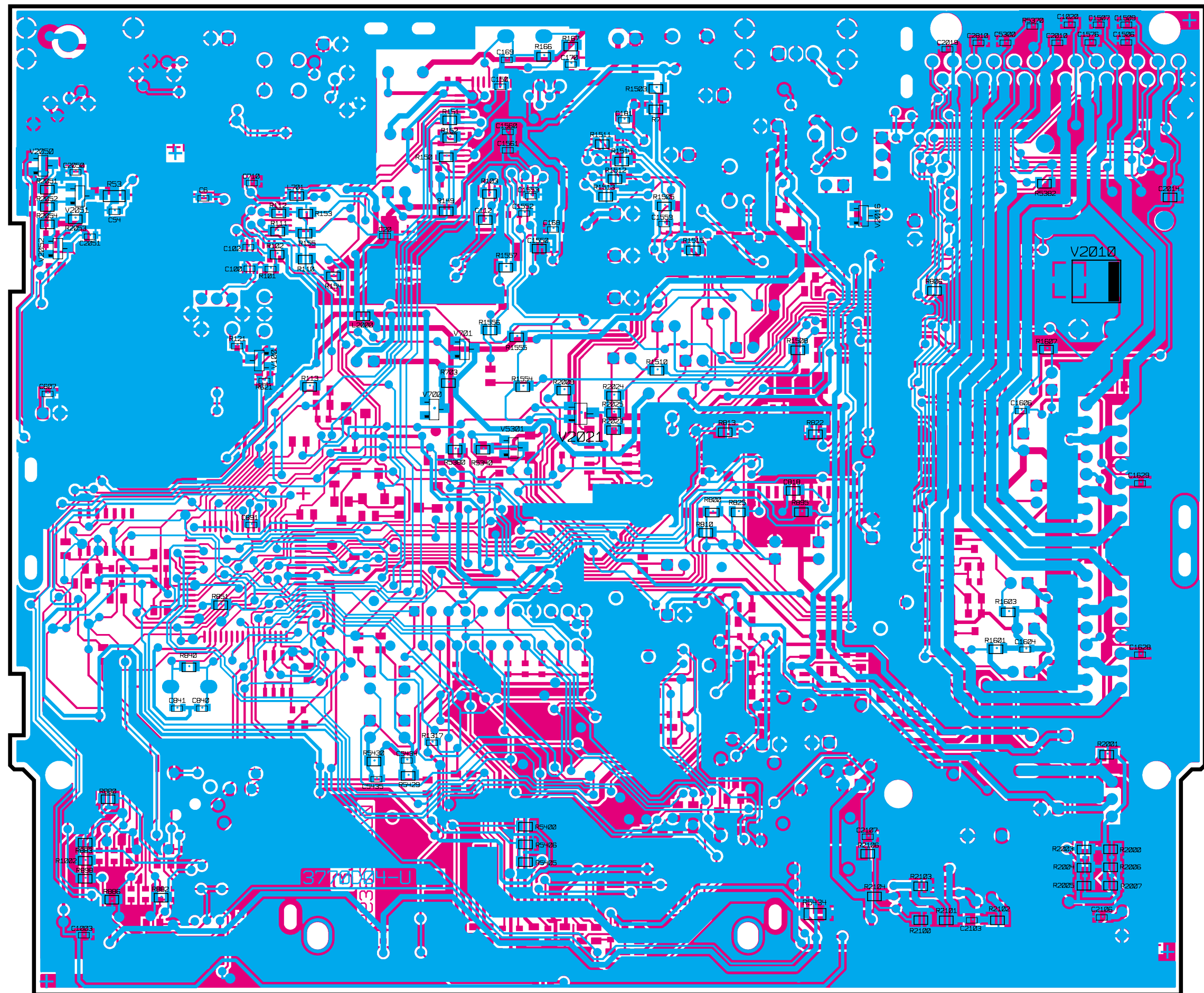
Nur MD
Only MD

NUR MD

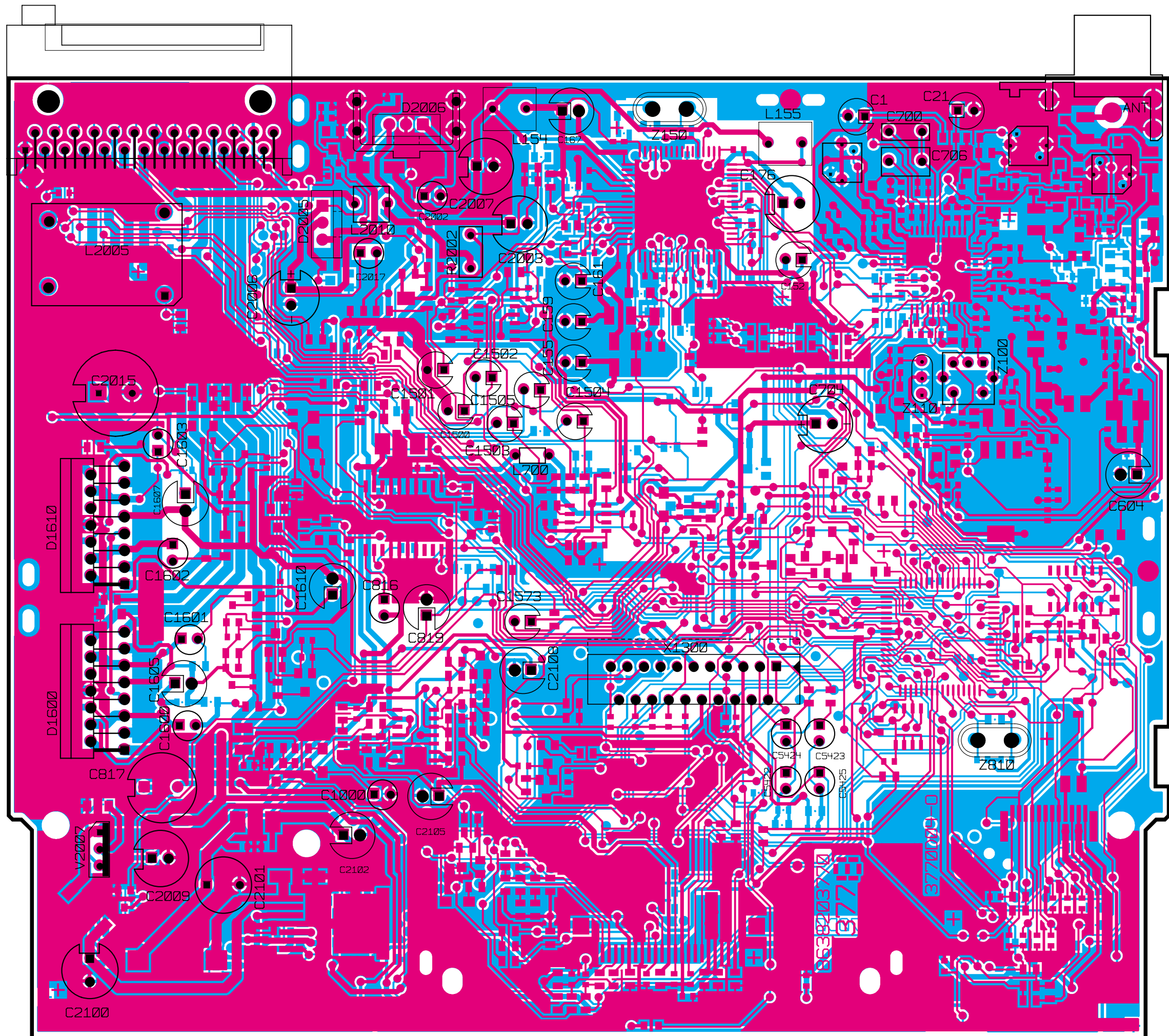


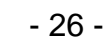
CC / MD - Interface

PL 3770 D04

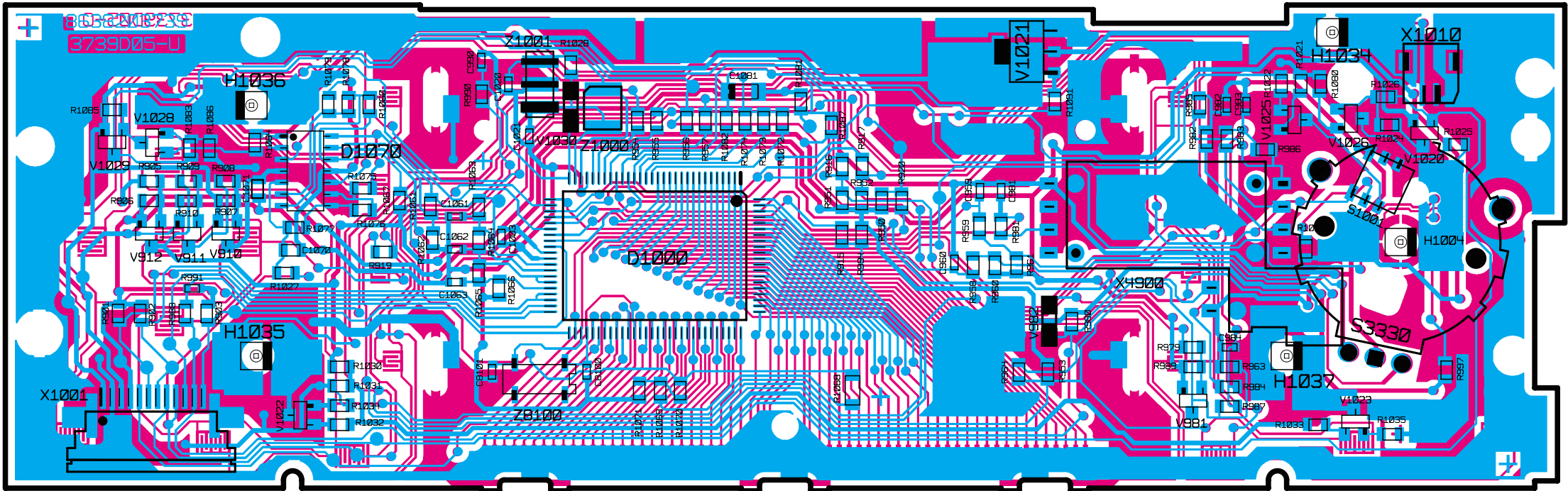




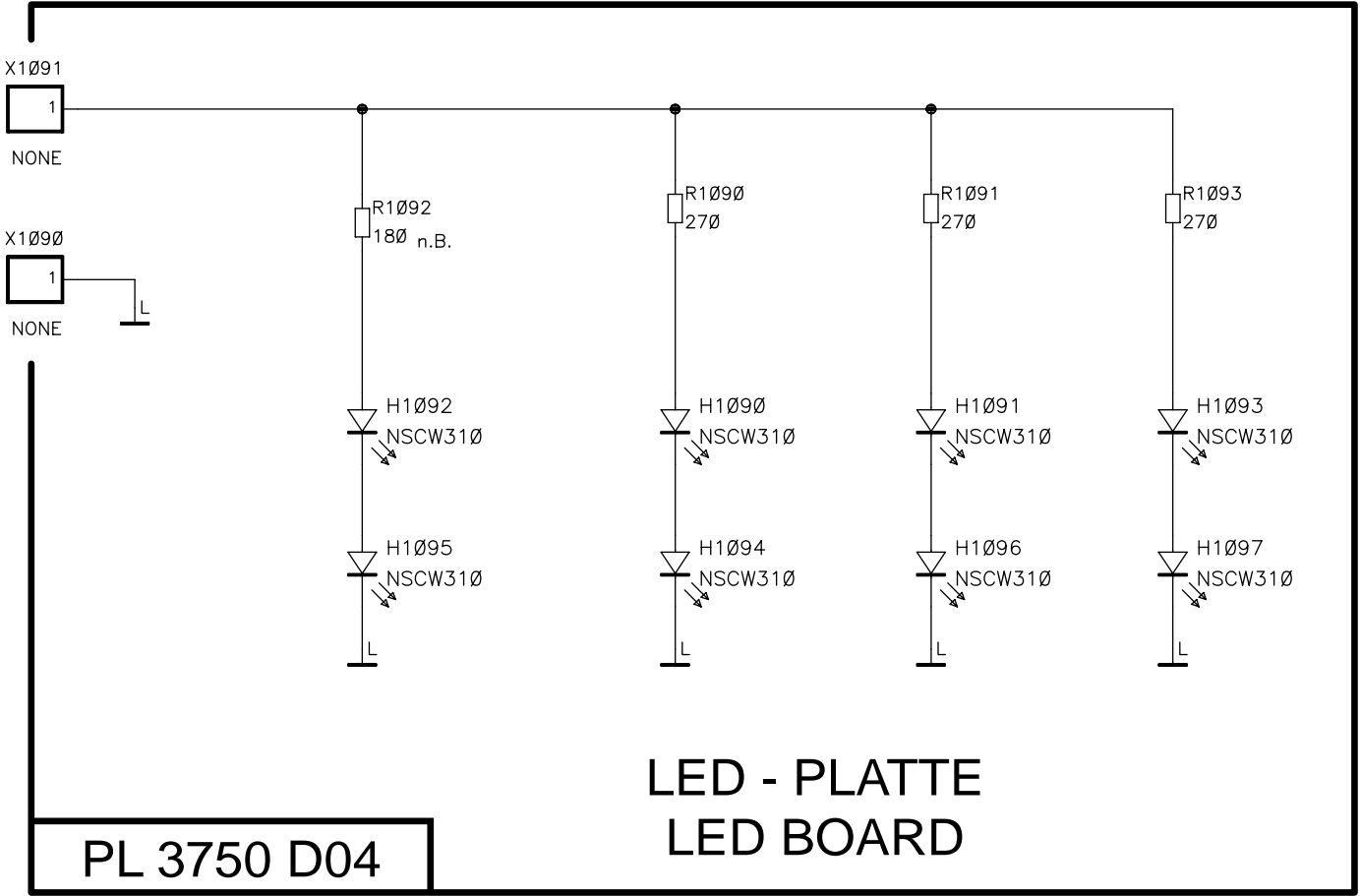
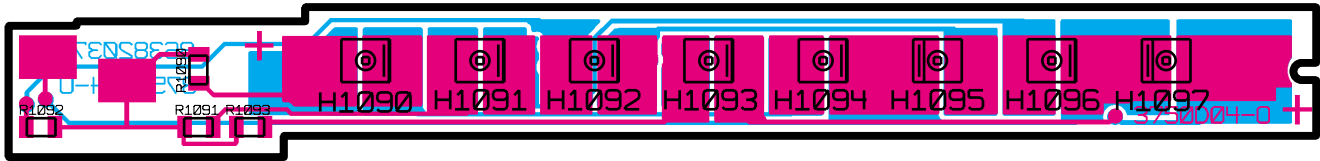


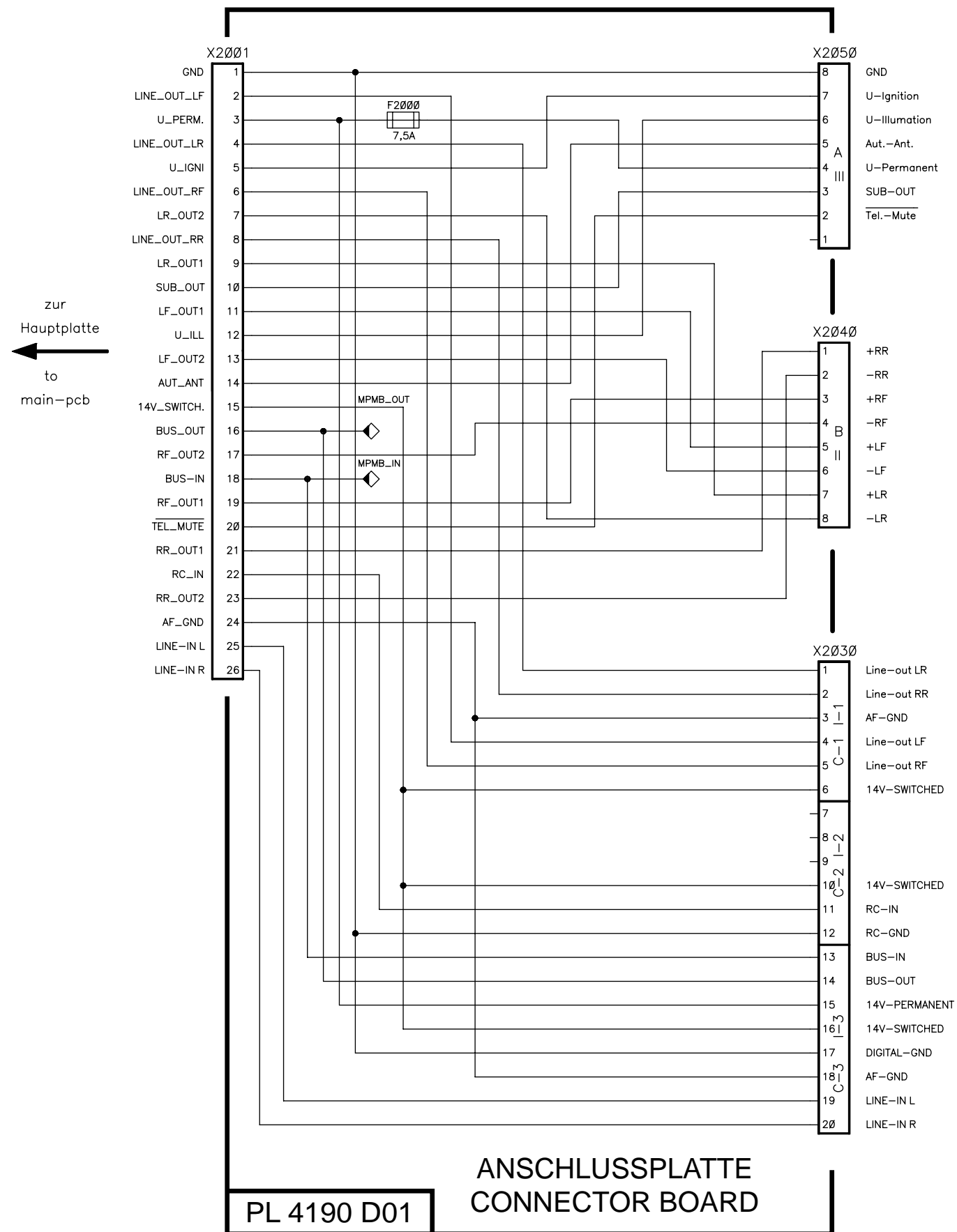


Schalterplatte
Key board
PL 3739 D05
Chip + B



LED-Platte
LED board
PL 3750 D04
Chip





**Anschlußplatte
Connector board
PL 4190 D01**

